



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/864,213

05/25/2001

Theodore C. Cadell

13202.

3225

27160

7590

09/08/2004

PATENT ADMINSTRATOR
KATTEN MUCHIN ZAVIS ROSENMAN
525 WEST MONROE STREET
SUITE 1600
CHICAGO, IL 60661-3693

EXAMINER

NGUYEN, CHAU M

ART UNIT

PAPER NUMBER

2633

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/864,213	CADELL ET AL.	
	Examiner	Art Unit	
	Chau M Nguyen	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>04/15/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Dempsey et al. (Hereinafter "Dempsey '734") (U.S. Pat. No. 5,687,734).

As claim 17, Dempsey '734 discloses a mobile transmitter (figs. 1 and 2) for monitoring a patient via physiological data comprising:

a sensor (220) interface for coupling to sensors disposed on the patient for collecting physiological data therefrom (col. 6, lines 32-37);

digital controller (119, see fig. 1, col. 5, lines 15-17) having an input (118, fig. 1) for analogue data from the sensor interface, an output for serial digital data derived from analogue data and an optical receiver and transmitter (117, fig. 1) for establishing a bi-direction optical link for receiving mobile transmitter configuration data during operation of the mobile transmitter; and

a radio frequency transmitter (224, 226, col. 6, lines 52-55 and 270, 272, col. 9, lines 58-61) for radio transmission of the serial digital data in dependence upon stored mobile transmitter configuration data (col. 6, lines 50-55).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 4-6, 14-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dempsey et al. (U.S. Pat. No. 5,687,734) (Hereinafter "Dempsey '734") in view of Dempsey et al. (U.S. Pat. No. 5,417,222) (Hereinafter "Dempsey '222").

As claims 1 and 18, Dempsey '734 discloses a system for monitoring a patient via physiological data comprising:

a mobile transmitter (200, fig. 2) including a sensor interface (220) for coupling to sensors disposed on the patient for collecting physiological data therefrom (col. 6, lines 32-37), a digital controller (119, detailed in fig. 1, col. 5, lines 15-17) having an input (118, fig. 1) for analogue data from the sensor interface, an output for serial digital data derived from analogue data and an optical receiver and transmitter (117, fig. 1, col. 5, lines 14-15) for establishing a bi-direction optical link for receiving mobile transmitter configuration data, and a radio frequency transmitter (224, 226, col. 6, lines 52-55 and 270, 272, col. 9, lines 58-61) for radio transmission of the serial digital data in dependence upon stored mobile transmitter configuration data (col. 4, line 24 - col. 5, line 17); and

a central monitor (base station) (204) including an antenna array (228) for receiving the wireless transmission from the mobile transmitter, a receiver (232) including an input coupled to the antenna array, an interface having an output for digital data

Art Unit: 2633

derived from the radio transmission and an input of mobile transmitter configuration data (col. 6, line 61 – col. 7, line 5), and a monitor coupled to the interface for display of the physiological data and for effecting transfer of mobile transmitter configuration data (col. 5, lines 50-55) during operation of the mobile transmitter.

Dempsey '734 does not clearly show an optical transmitter and receiver (at the base station) (as cited in claims 1 and 18) for establishing a bi-directional optical link for transmitting mobile transmitter configuration data to an adjacent mobile transmitter.

However, Dempsey '222 discloses an optical receiver and transmitter (IR transmitter) (32 and 54, respectively, see Dempsey '222, fig. 1) at a central station site for establishing a bi-direction optical link for receiving mobile transmitter configuration data (Dempsey '222, col. 7, lines 47-57).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to install an optical receiver and transmitter into the central station as it is mentioned by Dempsey '222 into the system of Dempsey '734 in order to enhance the system with more flexibility in receiving and transmitting signal (Dempsey '222, col. 8, lines 6-32).

As claims 4-6 and 14-16, Dempsey '734 discloses the reuse frequency, number of channels and range of radio frequency (col. 11 lines 49-61 and col. 13, lines 59-64).

5. Claims 2, 3 and 7-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dempsey '734 in view of Dempsey '222, as applied in the claim 1 above, and in further view of Burrows (U.S. Pat. No. 5,617,871).

As claims 2 and 3, the combination system of Dempsey '734 and Dempsey '222 does not clearly show the mobile transmitter configuration data including a packet sync byte value and/or word sync byte value. However, Burrows discloses a frame or word synchronization as a radio parameters (Burrows, col. 3, lines 32-34). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to use frame or word synchronization as taught by Burrows into the transmitting system of Dempsey '734 and Dempsey '222 in order to format the physiological signal. One having ordinary skill in the art would have motivated for doing this because the advantage of the system is that any physiological signal to transmit nearly error free signals to a monitoring unit for display, recording and/or analysis of the desired signal. (Burrows, col., 3, lines 40-43).

As claims 7 and 8, radio transmitter of Burrows including scrambler for scrambling (col. 6, lines 33-34).

As claim 9, Burrows discloses digital code sequence (col. 4, lines 61-63).

As claims 10 and 11, Burrows discloses radio transmitter characteristics include transmitter frequency and data rate (col. 4, lines 54-56).

As claim 12, Burrows discloses the radio transmitter uses differential Quadrature phase shift keying modulation (col. 1, lines 44-48).

As claim 13, the radio transmitter transmits of burrows using a direct sequence modulated spread spectrum signal (Abstract).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bible et al. (U.S. Pat. No. 5,226,431) is cited to show optical/electrical transceiver.

Gallant et al. (U.S. Pat. No. 5,309,920) is cited to show ambulatory electrocardiography patient monitoring system and method therefor.

Unger (U.S. Pat. No. 5,458,123) is cited to show system for monitoring patient location and data.

Iwasaki (U.S. Pat. No. 5,034,997) is cited to show communication system for data transmission using radio wave and optical transmission of message signals.

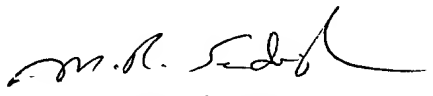
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau M Nguyen whose telephone number is 571-272-3030. The examiner can normally be reached on Mon-Fri from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571-272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C.M.N.

Sept. 02, 2004


M. R. SEDIGHIAN
PRIMARY EXAMINER

